

West Virginia Department of Environmental Protection  
Division of Air Quality

*Earl Ray Tomblin*  
Governor

*Randy C. Huffman*  
Cabinet Secretary

# Permit to Operate



Pursuant to  
**Title V**  
of the Clean Air Act

*Issued to:*  
**Dominion Transmission, Inc.**  
Bridgeport Compressor Station  
R30-03300100-2011

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*John A. Benedict*  
Director

*Issued: August 8, 2011 • Effective: August 22, 2011*  
*Expiration: August 8, 2016 • Renewal Application Due: February 8, 2011*

Permit Number: **R30-03300100-2011**  
Permittee: **Dominion Transmission, Inc.**  
Facility Name: **Bridgeport Compressor Station**  
Permittee Mailing Address: **445 West Main Street, Clarksburg, WV 26301**

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*This permit is issued in accordance with the West Virginia Air Pollution Control Act (West Virginia Code §§ 22-5-1 et seq.) and 45CSR30 — Requirements for Operating Permits. The permittee identified at the above-referenced facility is authorized to operate the stationary sources of air pollutants identified herein in accordance with all terms and conditions of this permit.*

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Facility Location:	Bridgeport, Harrison County, West Virginia
Facility Mailing Address:	Route 2, Box 145, Bridgeport, WV 26330
Telephone Number:	(304) 627-3096
Type of Business Entity:	Corporation
Facility Description:	Natural gas transmission facility
SIC Codes:	4922
UTM Coordinates:	567.05 km Easting • 4,355.39 km Northing • Zone 17

Permit Writer: Denton McDerment

*Any person whose interest may be affected, including, but not necessarily limited to, the applicant and any person who participated in the public comment process, by a permit issued, modified or denied by the Secretary may appeal such action of the Secretary to the Air Quality Board pursuant to article one [§§ 22B-1-1 et seq.], Chapter 22B of the Code of West Virginia. West Virginia Code §22-5-14.*

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*Issuance of this Title V Operating Permit does not supersede or invalidate any existing permits under 45CSR13, 14 or 19, although all applicable requirements from such permits governing the facility's operation and compliance have been incorporated into the Title V Operating Permit.*

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## 1.0 Emission Units and Active R13, R14, and R19 Permits

### 1.1 Emission Units

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
001-01	EN01	Reciprocating Engine/Integral Compressor; Cooper GMVA-8	1960	1,100 HP	N/A
001-02	EN02	Reciprocating Engine/Integral Compressor; Cooper GMVA-8	1963	1,100 HP	N/A
002-01	AUX02	Capstone C-60 microturbine	2002	60 kw	N/A
002-02	AUX03	Capstone C-60 microturbine	2002	60 kw	N/A
004-01	DEHY01	Dehydration Unit Still No. 1 (replacement)	2004	110 mmscf/day	Flare (1C)
005-01	BLR02	Boiler; Ajax WN-2500	2002	2.5 MMBtu/hr	N/A
005-02	RBR01	Glycol Reconcentrator (Dehydration Reboiler)	2004	0.75 MMBtu/hr	N/A
DEHY (1C)	DEHY(1C)	Dehydration unit flare; 98% destruction efficiency for HAPs (replacement)	2004	57 scf/min	N/A
TK01	TK01	Above Ground Tri-ethylene Glycol Storage Tank	1989	1,500 gallons	N/A
TK02	TK02	Above Ground Glycol/Water Storage Tank	1988	4,200 gallons	N/A
TK03	TK03	Above Ground Drip Gas Storage Tank	1980	4,200 gallons	N/A
TK04	TK04	Above Ground Engine Oil Storage Tank	2003	8,000 gallons	N/A
TK05	TK05	Horizontal Aboveground Storage Tank – Odorant	2003	1,000 gallons	N/A

### 1.2 Active R13, R14, and R19 Permits

The underlying authority for any conditions from R13, R14, and/or R19 permits contained in this operating permit is cited using the original permit number (e.g. R13-1234). The current applicable version of such permit(s) is listed below.

Permit Number	Date of Issuance
R13-1801F	12/18/2006

## 2.0 General Conditions

### 2.1. Definitions

- 2.1.1. All references to the "West Virginia Air Pollution Control Act" or the "Air Pollution Control Act" mean those provisions contained in W.Va. Code §§ 22-5-1 to 22-5-18.
- 2.1.2. The "Clean Air Act" means those provisions contained in 42 U.S.C. §§ 7401 to 7671q, and regulations promulgated thereunder.
- 2.1.3. "Secretary" means the Secretary of the Department of Environmental Protection or such other person to whom the Secretary has delegated authority or duties pursuant to W.Va. Code §§ 22-1-6 or 22-1-8 (45CSR§30-2.12.). The Director of the Division of Air Quality is the Secretary's designated representative for the purposes of this permit.
- 2.1.4. Unless otherwise specified in a permit condition or underlying rule or regulation, all references to a "rolling yearly total" shall mean the sum of the monthly data, values or parameters being measured, monitored, or recorded, at any given time for the previous twelve (12) consecutive calendar months.

### 2.2. Acronyms

<b>CAAA</b>	Clean Air Act Amendments	<b>NSPS</b>	New Source Performance
<b>CBI</b>	Confidential Business Information		Standards
<b>CEM</b>	Continuous Emission Monitor	<b>PM</b>	Particulate Matter
<b>CES</b>	Certified Emission Statement	<b>PM<sub>10</sub></b>	Particulate Matter less than 10µm in diameter
<b>C.F.R. or CFR</b>	Code of Federal Regulations		
<b>CO</b>	Carbon Monoxide	<b>pph</b>	Pounds per Hour
<b>C.S.R. or CSR</b>	Codes of State Rules	<b>ppm</b>	Parts per Million
<b>DAQ</b>	Division of Air Quality	<b>PSD</b>	Prevention of Significant Deterioration
<b>DEP</b>	Department of Environmental Protection	<b>psi</b>	Pounds per Square Inch
<b>FOIA</b>	Freedom of Information Act	<b>SIC</b>	Standard Industrial Classification
<b>HAP</b>	Hazardous Air Pollutant		
<b>HON</b>	Hazardous Organic NESHAP	<b>SIP</b>	State Implementation Plan
<b>HP</b>	Horsepower	<b>SO<sub>2</sub></b>	Sulfur Dioxide
<b>lbs/hr or lb/hr</b>	Pounds per Hour	<b>TAP</b>	Toxic Air Pollutant
<b>LDAR</b>	Leak Detection and Repair	<b>TPY</b>	Tons per Year
<b>m</b>	Thousand	<b>TRS</b>	Total Reduced Sulfur
<b>MACT</b>	Maximum Achievable Control Technology	<b>TSP</b>	Total Suspended Particulate
<b>mm</b>	Million	<b>USEPA</b>	United States Environmental Protection Agency
<b>mmBtu/hr</b>	Million British Thermal Units per Hour	<b>UTM</b>	Universal Transverse Mercator
<b>mmft<sup>3</sup>/hr or mmcf/hr</b>	Million Cubic Feet Burned per Hour	<b>VEE</b>	Visual Emissions Evaluation
<b>NA or N/A</b>	Not Applicable		
<b>NAAQS</b>	National Ambient Air Quality Standards	<b>VOC</b>	Volatile Organic Compounds
<b>NESHAPS</b>	National Emissions Standards for Hazardous Air Pollutants		
<b>NO<sub>x</sub></b>	Nitrogen Oxides		

### **2.3. Permit Expiration and Renewal**

- 2.3.1. Permit duration. This permit is issued for a fixed term of five (5) years and shall expire on the date specified on the cover of this permit, except as provided in 45CSR§30-6.3.b. and 45CSR§30-6.3.c.  
[45CSR§30-5.1.b.]
- 2.3.2. A permit renewal application is timely if it is submitted at least six (6) months prior to the date of permit expiration.  
[45CSR§30-4.1.a.3.]
- 2.3.3. Permit expiration terminates the source's right to operate unless a timely and complete renewal application has been submitted consistent with 45CSR§30-6.2. and 45CSR§30-4.1.a.3.  
[45CSR§30-6.3.b.]
- 2.3.4. If the Secretary fails to take final action to deny or approve a timely and complete permit application before the end of the term of the previous permit, the permit shall not expire until the renewal permit has been issued or denied, and any permit shield granted for the permit shall continue in effect during that time.  
[45CSR§30-6.3.c.]

### **2.4. Permit Actions**

- 2.4.1. This permit may be modified, revoked, reopened and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.  
[45CSR§30-5.1.f.3.]

### **2.5. Reopening for Cause**

- 2.5.1. This permit shall be reopened and revised under any of the following circumstances:
  - a. Additional applicable requirements under the Clean Air Act or the Secretary's legislative rules become applicable to a major source with a remaining permit term of three (3) or more years. Such a reopening shall be completed not later than eighteen (18) months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to 45CSR§§30-6.6.a.1.A. or B.
  - b. Additional requirements (including excess emissions requirements) become applicable to an affected source under Title IV of the Clean Air Act (Acid Deposition Control) or other legislative rules of the Secretary. Upon approval by U.S. EPA, excess emissions offset plans shall be incorporated into the permit.
  - c. The Secretary or U.S. EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.

- d. The Secretary or U.S. EPA determines that the permit must be revised or revoked and reissued to assure compliance with the applicable requirements.

[45CSR§30-6.6.a.]

## **2.6. Administrative Permit Amendments**

- 2.6.1. The permittee may request an administrative permit amendment as defined in and according to the procedures specified in 45CSR§30-6.4.

[45CSR§30-6.4.]

## **2.7. Minor Permit Modifications**

- 2.7.1. The permittee may request a minor permit modification as defined in and according to the procedures specified in 45CSR§30-6.5.a.

[45CSR§30-6.5.a.]

## **2.8. Significant Permit Modification**

- 2.8.1. The permittee may request a significant permit modification, in accordance with 45CSR§30-6.5.b., for permit modifications that do not qualify for minor permit modifications or as administrative amendments.

[45CSR§30-6.5.b.]

## **2.9. Emissions Trading**

- 2.9.1. No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for in the permit and that are in accordance with all applicable requirements.

[45CSR§30-5.1.h.]

## **2.10. Off-Permit Changes**

- 2.10.1. Except as provided below, a facility may make any change in its operations or emissions that is not addressed nor prohibited in its permit and which is not considered to be construction nor modification under any rule promulgated by the Secretary without obtaining an amendment or modification of its permit. Such changes shall be subject to the following requirements and restrictions:

- a. The change must meet all applicable requirements and may not violate any existing permit term or condition.
- b. The permittee must provide a written notice of the change to the Secretary and to U.S. EPA within two (2) business days following the date of the change. Such written notice shall describe each such change, including the date, any change in emissions, pollutants emitted, and any applicable requirement that would apply as a result of the change.
- c. The change shall not qualify for the permit shield.

- d. The permittee shall keep records describing all changes made at the source that result in emissions of regulated air pollutants, but not otherwise regulated under the permit, and the emissions resulting from those changes.
- e. No permittee may make any change subject to any requirement under Title IV of the Clean Air Act (Acid Deposition Control) pursuant to the provisions of 45CSR§30-5.9.
- f. No permittee may make any changes which would require preconstruction review under any provision of Title I of the Clean Air Act (including 45CSR14 and 45CSR19) pursuant to the provisions of 45CSR§30-5.9.

**[45CSR§30-5.9.]**

**2.11. Operational Flexibility**

- 2.11.1. The permittee may make changes within the facility as provided by § 502(b)(10) of the Clean Air Act. Such operational flexibility shall be provided in the permit in conformance with the permit application and applicable requirements. No such changes shall be a modification under any rule or any provision of Title I of the Clean Air Act (including 45CSR14 and 45CSR19) promulgated by the Secretary in accordance with Title I of the Clean Air Act and the change shall not result in a level of emissions exceeding the emissions allowable under the permit.

**[45CSR§30-5.8]**

- 2.11.2. Before making a change under 45CSR§30-5.8., the permittee shall provide advance written notice to the Secretary and to U.S. EPA, describing the change to be made, the date on which the change will occur, any changes in emissions, and any permit terms and conditions that are affected. The permittee shall thereafter maintain a copy of the notice with the permit, and the Secretary shall place a copy with the permit in the public file. The written notice shall be provided to the Secretary and U.S. EPA at least seven (7) days prior to the date that the change is to be made, except that this period may be shortened or eliminated as necessary for a change that must be implemented more quickly to address unanticipated conditions posing a significant health, safety, or environmental hazard. If less than seven (7) days notice is provided because of a need to respond more quickly to such unanticipated conditions, the permittee shall provide notice to the Secretary and U.S. EPA as soon as possible after learning of the need to make the change.

**[45CSR§30-5.8.a.]**

- 2.11.3. The permit shield shall not apply to changes made under 45CSR§30-5.8., except those provided for in 45CSR§30-5.8.d. However, the protection of the permit shield will continue to apply to operations and emissions that are not affected by the change, provided that the permittee complies with the terms and conditions of the permit applicable to such operations and emissions. The permit shield may be reinstated for emissions and operations affected by the change:

- a. If subsequent changes cause the facility's operations and emissions to revert to those authorized in the permit and the permittee resumes compliance with the terms and conditions of the permit, or
- b. If the permittee obtains final approval of a significant modification to the permit to incorporate the change in the permit.

**[45CSR§30-5.8.c.]**



- 2.11.4. "Section 502(b)(10) changes" are changes that contravene an express permit term. Such changes do not include changes that would violate applicable requirements or contravene enforceable permit terms and conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements.

[45CSR§30-2.39]

## **2.12. Reasonably Anticipated Operating Scenarios**

- 2.12.1. The following are terms and conditions for reasonably anticipated operating scenarios identified in this permit.
- a. Contemporaneously with making a change from one operating scenario to another, the permittee shall record in a log at the permitted facility a record of the scenario under which it is operating and to document the change in reports submitted pursuant to the terms of this permit and 45CSR30.
  - b. The permit shield shall extend to all terms and conditions under each such operating scenario; and
  - c. The terms and conditions of each such alternative scenario shall meet all applicable requirements and the requirements of 45CSR30.

[45CSR§30-5.1.i.]

## **2.13. Duty to Comply**

- 2.13.1. The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the West Virginia Code and the Clean Air Act and is grounds for enforcement action by the Secretary or USEPA; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.

[45CSR§30-5.1.f.1.]

## **2.14. Inspection and Entry**

- 2.14.1. The permittee shall allow any authorized representative of the Secretary, upon the presentation of credentials and other documents as may be required by law, to perform the following:
- a. At all reasonable times (including all times in which the facility is in operation) enter upon the permittee's premises where a source is located or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
  - b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
  - c. Inspect at reasonable times (including all times in which the facility is in operation) any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit;

- d. Sample or monitor at reasonable times substances or parameters to determine compliance with the permit or applicable requirements or ascertain the amounts and types of air pollutants discharged.

[45CSR§30-5.3.b.]

## **2.15. Schedule of Compliance**

- 2.15.1. For sources subject to a compliance schedule, certified progress reports shall be submitted consistent with the applicable schedule of compliance set forth in this permit and 45CSR§30-4.3.h., but at least every six (6) months, and no greater than once a month, and shall include the following:
  - a. Dates for achieving the activities, milestones, or compliance required in the schedule of compliance, and dates when such activities, milestones or compliance were achieved; and
  - b. An explanation of why any dates in the schedule of compliance were not or will not be met, and any preventative or corrective measure adopted.

[45CSR§30-5.3.d.]

## **2.16. Need to Halt or Reduce Activity not a Defense**

- 2.16.1. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. However, nothing in this paragraph shall be construed as precluding consideration of a need to halt or reduce activity as a mitigating factor in determining penalties for noncompliance if the health, safety, or environmental impacts of halting or reducing operations would be more serious than the impacts of continued operations.

[45CSR§30-5.1.f.2.]

## **2.17. Emergency**

- 2.17.1. An "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.

[45CSR§30-5.7.a.]

- 2.17.2. Effect of any emergency. An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions of 45CSR§30-5.7.c. are met.

[45CSR§30-5.7.b.]

- 2.17.3. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:
  - a. An emergency occurred and that the permittee can identify the cause(s) of the emergency;

- b. The permitted facility was at the time being properly operated;
- c. During the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit; and
- d. Subject to the requirements of 45CSR§30-5.1.c.3.C.1, the permittee submitted notice of the emergency to the Secretary within one (1) working day of the time when emission limitations were exceeded due to the emergency and made a request for variance, and as applicable rules provide. This notice, report, and variance request fulfills the requirement of 45CSR§30-5.1.c.3.B. This notice must contain a detailed description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.

**[45CSR§30-5.7.c.]**

- 2.17.4. In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof.

**[45CSR§30-5.7.d.]**

- 2.17.5. This provision is in addition to any emergency or upset provision contained in any applicable requirement.

**[45CSR§30-5.7.e.]**

## **2.18. Federally-Enforceable Requirements**

- 2.18.1. All terms and conditions in this permit, including any provisions designed to limit a source's potential to emit and excepting those provisions that are specifically designated in the permit as "State-enforceable only", are enforceable by the Secretary, USEPA, and citizens under the Clean Air Act.

**[45CSR§30-5.2.a.]**

- 2.18.2. Those provisions specifically designated in the permit as "State-enforceable only" shall become "Federally-enforceable" requirements upon SIP approval by the USEPA.

## **2.19. Duty to Provide Information**

- 2.19.1. The permittee shall furnish to the Secretary within a reasonable time any information the Secretary may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Secretary copies of records required to be kept by the permittee. For information claimed to be confidential, the permittee shall furnish such records to the Secretary along with a claim of confidentiality in accordance with 45CSR31. If confidential information is to be sent to USEPA, the permittee shall directly provide such information to USEPA along with a claim of confidentiality in accordance with 40 C.F.R. Part 2.

**[45CSR§30-5.1.f.5.]**

## **2.20. Duty to Supplement and Correct Information**

- 2.20.1. Upon becoming aware of a failure to submit any relevant facts or a submittal of incorrect information in any permit application, the permittee shall promptly submit to the Secretary such supplemental facts or corrected information.

**[45CSR§30-4.2.]**

## **2.21. Permit Shield**

- 2.21.1. Compliance with the conditions of this permit shall be deemed compliance with any applicable requirements as of the date of permit issuance provided that such applicable requirements are included and are specifically identified in this permit or the Secretary has determined that other requirements specifically identified are not applicable to the source and this permit includes such a determination or a concise summary thereof.

**[45CSR§30-5.6.a.]**

- 2.21.2. Nothing in this permit shall alter or affect the following:

- a. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance; or
- b. The applicable requirements of the Code of West Virginia and Title IV of the Clean Air Act (Acid Deposition Control), consistent with § 408 (a) of the Clean Air Act.
- c. The authority of the Administrator of U.S. EPA to require information under § 114 of the Clean Air Act or to issue emergency orders under § 303 of the Clean Air Act.

**[45CSR§30-5.6.c.]**

## **2.22. Credible Evidence**

- 2.22.1. Nothing in this permit shall alter or affect the ability of any person to establish compliance with, or a violation of, any applicable requirement through the use of credible evidence to the extent authorized by law. Nothing in this permit shall be construed to waive any defenses otherwise available to the permittee including but not limited to any challenge to the credible evidence rule in the context of any future proceeding.

**[45CSR§30-5.3.e.3.B. and 45CSR38]**

## **2.23. Severability**

- 2.23.1. The provisions of this permit are severable. If any provision of this permit, or the application of any provision of this permit to any circumstance is held invalid by a court of competent jurisdiction, the remaining permit terms and conditions or their application to other circumstances shall remain in full force and effect.

**[45CSR§30-5.1.e.]**

## **2.24. Property Rights**

- 2.24.1. This permit does not convey any property rights of any sort or any exclusive privilege.

**[45CSR§30-5.1.f.4]**

## **2.25. Acid Deposition Control**

- 2.25.1. Emissions shall not exceed any allowances that the source lawfully holds under Title IV of the Clean Air Act (Acid Deposition Control) or rules of the Secretary promulgated thereunder.
- a. No permit revision shall be required for increases in emissions that are authorized by allowances acquired pursuant to the acid deposition control program, provided that such increases do not require a permit revision under any other applicable requirement.
  - b. No limit shall be placed on the number of allowances held by the source. The source may not, however, use allowances as a defense to noncompliance with any other applicable requirement.
  - c. Any such allowance shall be accounted for according to the procedures established in rules promulgated under Title IV of the Clean Air Act.

**[45CSR§30-5.1.d.]**

- 2.25.2. Where applicable requirements of the Clean Air Act are more stringent than any applicable requirement of regulations promulgated under Title IV of the Clean Air Act (Acid Deposition Control), both provisions shall be incorporated into the permit and shall be enforceable by the Secretary and U. S. EPA.

**[45CSR§30-5.1.a.2.]**

### 3.0 Facility-Wide Requirements

#### 3.1. Limitations and Standards

- 3.1.1. **Open burning.** The open burning of refuse by any person is prohibited except as noted in 45CSR§6-3.1.  
[45CSR§6-3.1.]
- 3.1.2. **Open burning exemptions.** The exemptions listed in 45CSR§6-3.1 are subject to the following stipulation: Upon notification by the Secretary, no person shall cause or allow any form of open burning during existing or predicted periods of atmospheric stagnation. Notification shall be made by such means as the Secretary may deem necessary and feasible.  
[45CSR§6-3.2.]
- 3.1.3. **Asbestos.** The permittee is responsible for thoroughly inspecting the facility, or part of the facility, prior to commencement of demolition or renovation for the presence of asbestos and complying with 40 C.F.R. §61.145, 40 C.F.R. §61.148, and 40 C.F.R. §61.150. The permittee, owner, or operator must notify the Secretary at least ten (10) working days prior to the commencement of any asbestos removal on the forms prescribed by the Secretary if the permittee is subject to the notification requirements of 40 C.F.R. §61.145(b)(3)(i). The USEPA, the Division of Waste Management and the Bureau for Public Health - Environmental Health require a copy of this notice to be sent to them.  
[40 C.F.R. §61.145(b) and 45CSR34]
- 3.1.4. **Odor.** No person shall cause, suffer, allow or permit the discharge of air pollutants which cause or contribute to an objectionable odor at any location occupied by the public.  
[45CSR§4-3.1 State-Enforceable only.]
- 3.1.5. **Standby plan for reducing emissions.** When requested by the Secretary, the permittee shall prepare standby plans for reducing the emissions of air pollutants in accordance with the objectives set forth in Tables I, II, and III of 45CSR11.  
[45CSR§11-5.2]
- 3.1.6. **Emission inventory.** The permittee is responsible for submitting, on an annual basis, an emission inventory in accordance with the submittal requirements of the Division of Air Quality.  
[W.Va. Code § 22-5-4(a)(14)]
- 3.1.7. **Ozone-depleting substances.** For those facilities performing maintenance, service, repair or disposal of appliances, the permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 C.F.R. Part 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:
- a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the prohibitions and required practices pursuant to 40 C.F.R. §§ 82.154 and 82.156.
  - b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 C.F.R. § 82.158.

- c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 C.F.R. § 82.161.

**[40 C.F.R. 82, Subpart F]**

- 3.1.8. **Risk Management Plan.** Should this stationary source, as defined in 40 C.F.R. § 68.3, become subject to Part 68, then the owner or operator shall submit a risk management plan (RMP) by the date specified in 40 C.F.R. § 68.10 and shall certify compliance with the requirements of Part 68 as part of the annual compliance certification as required by 40 C.F.R. Part 70 or 71.

**[40 C.F.R. 68]**

- 3.1.9. No person shall cause, suffer, allow or permit fugitive particulate matter to be discharged beyond the boundary lines of the property on which the discharge originates or at any public or residential location, which causes or contributes to statutory air pollution.

**[45CSR§17-3.1; State Enforceable only]**

### **3.2. Monitoring Requirements**

- 3.2.1. Reserved.

### **3.3. Testing Requirements**

- 3.3.1. **Stack testing.** As per provisions set forth in this permit or as otherwise required by the Secretary, in accordance with the West Virginia Code, underlying regulations, permits and orders, the permittee shall conduct test(s) to determine compliance with the emission limitations set forth in this permit and/or established or set forth in underlying documents. The Secretary, or his duly authorized representative, may at his option witness or conduct such test(s). Should the Secretary exercise his option to conduct such test(s), the operator shall provide all necessary sampling connections and sampling ports to be located in such manner as the Secretary may require, power for test equipment and the required safety equipment, such as scaffolding, railings and ladders, to comply with generally accepted good safety practices. Such tests shall be conducted in accordance with the methods and procedures set forth in this permit or as otherwise approved or specified by the Secretary in accordance with the following:
  - a. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with 40 C.F.R. Parts 60, 61, and 63, if applicable, in accordance with the Secretary's delegated authority and any established equivalency determination methods which are applicable.
  - b. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with applicable requirements which do not involve federal delegation. In specifying or approving such alternative testing to the test methods, the Secretary, to the extent possible, shall utilize the same equivalency criteria as would be used in approving such changes under Section 3.3.1.a. of this permit.
  - c. All periodic tests to determine mass emission limits from or air pollutant concentrations in discharge stacks and such other tests as specified in this permit shall be conducted in accordance with an approved test protocol. Unless previously approved, such protocols shall be submitted to the Secretary in writing at least thirty (30) days prior to any testing and shall contain the information set forth by the Secretary. In addition, the permittee shall notify the Secretary at least fifteen (15) days prior to any

testing so the Secretary may have the opportunity to observe such tests. This notification shall include the actual date and time during which the test will be conducted and, if appropriate, verification that the tests will fully conform to a referenced protocol previously approved by the Secretary.

- d. The permittee shall submit a report of the results of the stack test within 60 days of completion of the test. The test report shall provide the information necessary to document the objectives of the test and to determine whether proper procedures were used to accomplish these objectives. The report shall include the following: the certification described in paragraph 3.5.1; a statement of compliance status, also signed by a responsible official; and, a summary of conditions which form the basis for the compliance status evaluation. The summary of conditions shall include the following:
  1. The permit or rule evaluated, with the citation number and language.
  2. The result of the test for each permit or rule condition.
  3. A statement of compliance or non-compliance with each permit or rule condition.

[WV Code §§ 22-5-4(a)(14-15) and 45CSR13, R13-1801, C.4.]

### **3.4. Recordkeeping Requirements**

- 3.4.1. **Monitoring information.** The permittee shall keep records of monitoring information that include the following:
  - a. The date, place as defined in this permit and time of sampling or measurements;
  - b. The date(s) analyses were performed;
  - c. The company or entity that performed the analyses;
  - d. The analytical techniques or methods used;
  - e. The results of the analyses; and
  - f. The operating conditions existing at the time of sampling or measurement.

[45CSR§30-5.1.c.2.A.]

- 3.4.2. **Retention of records.** The permittee shall retain records of all required monitoring data and support information for a period of at least five (5) years from the date of monitoring sample, measurement, report, application, or record creation date. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. Where appropriate, records may be maintained in computerized form in lieu of the above records.

[45CSR§30-5.1.c.2.B.]

- 3.4.3. **Odors.** For the purposes of 45CSR4, the permittee shall maintain a record of all odor complaints received, any investigation performed in response to such a complaint, and any responsive action(s) taken.

[45CSR§30-5.1.c. State-Enforceable only.]



### 3.5. Reporting Requirements

- 3.5.1. **Responsible official.** Any application form, report, or compliance certification required by this permit to be submitted to the DAQ and/or USEPA shall contain a certification by the responsible official that states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete.  
[45CSR§30-4.4. and 5.1.c.3.D.]
- 3.5.2. A permittee may request confidential treatment for the submission of reporting required under 45CSR§30-5.1.c.3. pursuant to the limitations and procedures of W.Va. Code § 22-5-10 and 45CSR31.  
[45CSR§30-5.1.c.3.E.]
- 3.5.3. Except for the electronic submittal of the annual certification to the USEPA as required in 3.5.5 below, all notices, requests, demands, submissions and other communications required or permitted to be made to the Secretary of DEP and/or USEPA shall be made in writing and shall be deemed to have been duly given when delivered by hand, mailed first class or by private carrier with postage prepaid to the address(es) set forth below or to such other person or address as the Secretary of the Department of Environmental Protection may designate:

#### If to the DAQ:

Director  
WVDEP  
Division of Air Quality  
601 57<sup>th</sup> Street SE  
Charleston, WV 25304  
  
Phone: 304/926-0475  
FAX: 304/926-0478

#### If to the US EPA:

Associate Director  
Office of Enforcement and Permits Review  
(3AP12)  
U. S. Environmental Protection Agency  
Region III  
1650 Arch Street  
Philadelphia, PA 19103-2029

- 3.5.4. **Certified emissions statement.** The permittee shall submit a certified emissions statement and pay fees on an annual basis in accordance with the submittal requirements of the Division of Air Quality.  
[45CSR§30-8.]
- 3.5.5. **Compliance certification.** The permittee shall certify compliance with the conditions of this permit on the forms provided by the DAQ. In addition to the annual compliance certification, the permittee may be required to submit certifications more frequently under an applicable requirement of this permit. The annual certification shall be submitted to the DAQ and USEPA on or before March 15 of each year, and shall certify compliance for the period ending December 31. The annual certification to the USEPA shall be submitted in electronic format only. It shall be submitted by e-mail to the following address: [R3\\_APD\\_Permits@epa.gov](mailto:R3_APD_Permits@epa.gov). The permittee shall maintain a copy of the certification on site for five (5) years from submittal of the certification.  
[45CSR§30-5.3.e.]

- 3.5.6. **Semi-annual monitoring reports.** The permittee shall submit reports of any required monitoring on or before September 15 for the reporting period January 1 to June 30 and on or before March 15 for the reporting period July 1 to December 31. All instances of deviation from permit requirements must be clearly identified in such reports. All required reports must be certified by a responsible official consistent with 45CSR§30-4.4.

[45CSR§30-5.1.c.3.A.]

- 3.5.7. **Emergencies.** For reporting emergency situations, refer to Section 2.17 of this permit.

- 3.5.8. **Deviations.**

- a. In addition to monitoring reports required by this permit, the permittee shall promptly submit supplemental reports and notices in accordance with the following:

1. Any deviation resulting from an emergency or upset condition, as defined in 45CSR§30-5.7., shall be reported by telephone or telefax within one (1) working day of the date on which the permittee becomes aware of the deviation, if the permittee desires to assert the affirmative defense in accordance with 45CSR§30-5.7. A written report of such deviation, which shall include the probable cause of such deviations, and any corrective actions or preventative measures taken, shall be submitted and certified by a responsible official within ten (10) days of the deviation.
2. Any deviation that poses an imminent and substantial danger to public health, safety, or the environment shall be reported to the Secretary immediately by telephone or telefax. A written report of such deviation, which shall include the probable cause of such deviation, and any corrective actions or preventative measures taken, shall be submitted by the responsible official within ten (10) days of the deviation.
3. Deviations for which more frequent reporting is required under this permit shall be reported on the more frequent basis.
4. All reports of deviations shall identify the probable cause of the deviation and any corrective actions or preventative measures taken.

[45CSR§30-5.1.c.3.C.]

- b. The permittee shall, in the reporting of deviations from permit requirements, including those attributable to upset conditions as defined in this permit, report the probable cause of such deviations and any corrective actions or preventive measures taken in accordance with any rules of the Secretary.

[45CSR§30-5.1.c.3.B.]

- 3.5.9. **New applicable requirements.** If any applicable requirement is promulgated during the term of this permit, the permittee will meet such requirements on a timely basis, or in accordance with a more detailed schedule if required by the applicable requirement.

[45CSR§30-4.3.h.1.B.]

3.5.10. If, for any reason, the permittee does not comply or will not be able to comply with the emission limitations or other requirements of this permit, the permittee shall provide the DAQ with the following information as soon as possible, but not later than five (5) days after such conditions become known to the permittee:

- a) description of non-compliance,
- b) cause of non-compliance,
- c) anticipated time the non-compliance is expected to continue or, if corrected, the actual duration of non-compliance,
- d) steps taken by the permittee to minimize or eliminate the non-compliance,
- e) steps taken by permittee to prevent reoccurrence of the non-compliance.

Submittal of this report does not constitute a waiver of the emission limitations or other conditions of this permit.

**[45CSR13, R13-1801, B.1]**

### **3.6. Compliance Plan**

3.6.1. There is no compliance plan since a Responsible Official certified compliance with all applicable requirements in the renewal application.

### **3.7. Permit Shield**

3.7.1. The permittee is hereby granted a permit shield in accordance with 45CSR§30-5.6. The permit shield applies provided the permittee operates in accordance with the information contained within this permit.

3.7.2. The following requirements specifically identified are not applicable to the source based on the determinations set forth below. The permit shield shall apply to the following requirements provided the conditions of the determinations are met.

- a. **45CSR10 – To Prevent and Control Air Pollution from the Emission of Sulfur Oxides for Certain Sources.** Compressor Engines (EN01, EN02): WVDEP has determined that this rule does not apply to natural gas-fired engines (EN01, EN02). Boiler (BLR02): The 2.5 MMBtu/hr boiler meets the exemption at 45CSR§10-10.1., which states, “Any fuel burning units having a design heat input under ten (10) million BTU's per hour will be exempt from section 3 and sections 6 through 8.” Rule sections 4 and 5 are not covered by this exemption. 45CSR§10-4 sets SO<sub>2</sub> limits from source operations. 45CSR§10-4 does not apply to BLR02 because it is not a “source operation” as defined in 45CSR§10-2.19. 45CSR§10-5.1. prohibits combustion of refinery process gas streams or other process gas streams that contain certain concentrations of hydrogen sulfide. 45CSR§10-5.2. pertains to by-product coke operations. The permittee’s source BLR02 is not subject to either of these subsections; therefore, 45CSR§10-5 does not apply to BLR02.
- b. **Prevention of Significant Deterioration and Title V Greenhouse Gas Tailoring Rule.** The facility has not made any changes that trigger a PSD modification; therefore, the requirements of the GHG tailoring rule are non-applicable.
- c. **40 C.F.R. 60 Subpart IIII – Standards of Performance for Stationary Compression Ignition Internal Combustion Engines.** This subpart applies to manufacturers, owners, and operators of stationary compression ignition internal combustion engines that have been constructed, reconstructed,

or modified after various dates, the earliest of which is July 11, 2005. All of the engines (EN01, EN02) at the facility are spark ignition IC engines, and therefore the requirements of this subpart do not apply.

- d. **40 C.F.R. 60 Subpart JJJJ – Standards of Performance for Stationary Spark Ignition Internal Combustion Engines.** This subpart applies to manufacturers, owners, and operators of stationary spark ignition internal combustion engines that have been constructed, reconstructed, or modified after various dates, the earliest of which is June 12, 2006. All of the engines (EN01, EN02) at the facility were installed prior to 2006 and have not been modified or reconstructed, and therefore the requirements of this subpart do not apply.
- e. **40 C.F.R. 60 Subparts D, Da, Db, and Dc.** These subparts apply to steam generating units of various sizes, all greater than 10 MMBtu/hr. The facility does not have any steam generating units greater than 10 MMBtu/hr; therefore, the requirements of NSPS Subparts D, Da, Db, and Dc do not apply.
- f. **40 C.F.R. 60 Subparts K, Ka, Kb.** These subparts apply to storage tanks of certain sizes constructed, reconstructed, or modified during various time periods. Subpart K applies to storage tanks constructed, reconstructed, or modified after 1973 and prior to 1978, and subpart Ka applies to those constructed, reconstructed, or modified after 1978 and prior to 1984. Both subparts K and Ka apply to storage tanks with a capacity greater than 40,000 gallons. Subpart Kb applies to volatile organic liquid (VOL) storage tanks constructed, reconstructed, or modified after July 23, 1984 with a capacity equal to or greater than 75 m<sup>3</sup> (~19,813 gallons). Each of the tanks at the facility have a capacity less than 19,813 gallons. As such, NSPS Subparts K, Ka, and Kb do not apply to the storage tanks at the facility.
- g. **40 C.F.R. 60 Subpart KKK – Standards of Performance for Equipment Leaks of VOC from Onshore Natural Gas Processing Plants.** According to 40 C.F.R. §60.631, a *Natural gas processing plant* (gas plant) means any processing site engaged in the extraction of natural gas liquids from field gas, fractionation of mixed natural gas liquids to natural gas products, or both. Although this subpart includes requirements for compressors and storage tanks, it only applies to those units located at a natural gas processing plant as defined by the regulation. Even though the facility removes water from the natural gas, it does not extract *Natural gas liquids* (which excludes water, per the definition at §60.631). In summary, the operations at the facility do not meet the definition of a *Natural gas processing plant*; therefore, the requirements of this subpart do not apply to the emission units at the facility.
- h. **40 C.F.R. 60 Subpart LLL – Standards of Performance for Onshore Natural Gas Processing: SO<sub>2</sub> Emissions.** According to 40 C.F.R. §60.640(a), this subpart applies to each sweetening unit, and each sweetening unit followed by a sulfur recovery unit, at a natural gas processing plant. The facility does not meet the definition of a natural gas processing plant, nor does the facility include a sweetening unit. Therefore, the requirements of this subpart do not apply.
- i. **40 C.F.R. Part 63 Subpart HH – National Emission Standards for Hazardous Air Pollutants from Oil and Natural Gas Production Facilities.** According to 40 C.F.R. §63.760, Subpart HH is applicable to emission points that "are located at oil and natural gas production facilities that meet the specified criteria". The facility is not considered to be within the natural gas production source category since it does not meet the definition of *Facility* in 40 C.F.R. §63.761. Rather, it is categorized as a natural gas transmission and storage facility, which is potentially subject to 40 C.F.R. 63 Subpart HHH.

- j. **40 C.F.R. Part 63 Subpart HHH - National Emission Standards for Hazardous Air Pollutants From Natural Gas Transmission and Storage Facilities.** According to §63.1270(a) “This subpart applies to owners and operators of natural gas transmission and storage facilities that transport or store natural gas prior to entering the pipeline to a local distribution company or to a final end user (if there is no local distribution company), and that are major sources of hazardous air pollutants (HAP) emissions as defined in §63.1271.” While the facility is considered to be within the natural gas transmission and storage source category, it does not meet the potential HAP emissions threshold criterion (by use of the federally enforceable permitted flare to gain synthetic minor status for HAPs). The potential HAP emissions of the facility do not exceed the major source thresholds; therefore, this regulation does not apply to the facility. Further, the regulation does not contain any area source provisions.
- k. **40 C.F.R. 63 Subpart JJJJJ – National Emission Standards for Hazardous Air Pollutants for Area Sources: Industrial, Commercial, and Institutional Boilers.** According to 40 C.F.R. §63.11195(e), a gas-fired boiler as defined in §63.11237 is not subject to this subpart and to any requirements of this subpart. The definition states that a “*Gas-fired boiler* includes any boiler that burns gaseous fuels not combined with any solid fuels, burns liquid fuel only during periods of gas curtailment, gas supply emergencies, or periodic testing on liquid fuel. Periodic testing of liquid fuel shall not exceed a combined total of 48 hours during any calendar year.” The gas-fired Ajax Boiler (BLR02) combusts only natural gas, and does not combust solid or liquid fuels. Therefore, BLR02 meets the exemption in §63.11195(e) and this rule does not apply.
- l. **40 C.F.R. 64 Compliance Assurance Monitoring (CAM).** This is the second permit renewal for this facility. At the time of the first renewal, CAM was determined not to be applicable to the sources at this facility. Therefore, a CAM applicability determination is not required.

### 3.8. Emergency Operating Scenario

For emergency situations which interrupt the critical supply of natural gas to the public, and which pose a life threatening circumstance to the customer, the permittee is allowed to temporarily replace failed engine(s) as long as all of the following conditions are met:

- a. The replacement engine(s) is only allowed to operate until repair of the failed engine(s) is complete, but under no circumstance may the replacement engine(s) operate in excess of sixty (60) days;
- b. Both the replacement engine(s) and the repaired failed engine(s) shall not operate at the same time with the exception of any necessary testing of the repaired engine(s) and this testing may not exceed five (5) hours;
- c. Potential hourly emissions from the replacement engine(s) are less than or equal to the potential hourly emissions from the engine(s) being replaced;
- d. Credible performance emission test data verifying the emission rates associated with the operation of the substitute engine shall be submitted to the Director within five (5) days;
- e. The permittee must provide written notification to the Director within five (5) days of the replacement. This notification must contain:
  - i. Information to support the claim of life threatening circumstances to justify applicability of this emergency provision;
  - ii. Identification of the engine(s) being temporarily replaced;

- iii. The design parameters of the replacement engine(s) including, but not limited to, the design horsepower and emission factors;
- iv. Projected duration of the replacement engine(s); and
- v. The appropriate certification by a responsible official.

**[45CSR§30-12.7]**

#### **4.0 Boiler and Reboiler [emission point ID(s): BLR02, RBR01]**

##### **4.1. Limitations and Standards**

- 4.1.1. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any fuel burning unit which is greater than ten (10) percent opacity based on a six minute block average.  
[45CSR§2-3.1]

##### **4.2. Monitoring Requirements**

- 4.2.1. Reserved.

##### **4.3. Testing Requirements**

- 4.3.1. Reserved.

##### **4.4. Recordkeeping Requirements**

- 4.4.1. Reserved.

##### **4.5. Reporting Requirements**

- 4.5.1. Reserved.

##### **4.6. Compliance Plan**

- 4.6.1. Reserved.

## **5.0 Dehydration Unit Still No.1 and Flare [emission point ID(s): DEHY01, DEHY]**

### **5.1. Limitations and Standards**

- 5.1.1. No person shall cause, suffer, allow or permit particulate matter to be discharged from any incinerator into the open air in excess of the quantity determined by use of the following formula:

Emissions (lb/hr) = F x Incinerator Capacity (tons/hr)

Where, the factor, F, is as indicated in Table I below:

Table I: Factor, F, for Determining Maximum Allowable Particulate Emissions

Incinerator Capacity: Factor F

A. Less than 15,000 lbs/hr 5.43

B. 15,000 lbs/hr or greater 2.72

*Calculation for PM Emissions:*

$(5.43) \times (75.4 \text{ cf/min}) \times (60 \text{ min/hr}) \times (0.04579 \text{ lb/cf}) \times (\text{ton}/2000 \text{ lb})$

$= 0.5624 \text{ lb/hr}$

**[45CSR§6-4.1.; 45CSR13, R13-1801, B.4.] (DEHY)**

- 5.1.2. Emission of Visible Particulate Matter --No person shall cause, suffer, allow or permit emission of smoke into the atmosphere from any incinerator which is twenty (20%) percent opacity or greater.

**[45CSR§6-4.3.; 45CSR13, R13-1801, B.4] (DEHY)**

- 5.1.3. The provisions of Section 5.1.2 shall not apply to smoke which is less than forty (40%) percent opacity, for a period or periods aggregating no more than eight (8) minutes per start-up.

**[45CSR§6-4.4.; 45CSR13, R13-1801, B.4] (DEHY)**

- 5.1.4. No person shall cause, suffer, allow or permit the emission of particles of unburned or partially burned refuse or ash from any incinerator which are large enough to be individually distinguished in the open air.

**[45CSR§6-4.5.] (DEHY)**

- 5.1.5. Incinerators, including all associated equipment and grounds, shall be designed, operated and maintained so as to prevent the emission of objectionable odors.

**[45CSR§6-4.6.] (DEHY)**

- 5.1.6. No person shall cause, suffer, allow or permit the emission into the open air from any source operation an in-stack sulfur dioxide concentration exceeding 2,000 parts per million by volume from existing source operations, except as provided in 45CSR§10-4.1.a through 45CSR§10-4.1.e.

**[45CSR§10-4.1.; 45CSR13, R13-1801, B.5] (DEHY01, DEHY)**



- 5.1.7. No person shall cause, suffer, allow or permit the combustion of any refinery process gas stream or any other process gas stream that contains hydrogen sulfide in a concentration greater than 50 grains per 100 cubic feet of gas except in the case of a person operating in compliance with an emission control and mitigation plan approved by the Director and U. S. EPA. In certain cases very small units may be considered exempt from this requirement if, in the opinion of the Director, compliance would be economically unreasonable and if the contribution of the unit to the surrounding air quality could be considered negligible.

**[45CSR§10-5.1.; 45CSR13, R13-1801, B.5] (DEHY01, DEHY)**

- 5.1.8. The maximum amount of wet gas processed through the dehydration system shall not exceed 110 MMscf/day or 40,150 MMscf/year. Compliance with the processing limit shall be determined using a rolling yearly total. A rolling yearly total shall mean the sum of the wet gas processed at any given time for the previous twelve (12) consecutive calendar months.

**[45CSR13, R13-1801, A.2]**

- 5.1.9. In accordance with the information filed in permit application R13-1801E, the flare control device, 1C, shall be modified, operated and maintained to achieve, at a minimum, a 98% reduction of hazardous air pollutants (HAP).

**[45CSR13, R13-1801, A.1]**

- 5.1.10. In this section “this part” means 40 CFR 60, “this subpart” means 40 C.F.R § 60.18.

The glycol dehydration still column shall be equipped with a flare to control organic compound emissions. The flare shall be fired with natural gas and shall be operated with 98% control efficiency or greater. In accordance with 40 C.F.R § 60.18 “General Control Device Requirements” paragraphs (c) through (f), a flare shall be operated with 95% control efficiency or better.

40 C.F.R. 60.18 “General Control Device Requirements” paragraphs (c) through (f):

- (c) (1) Flares shall be designed for and operated with no visible emissions as determined by the methods specified in paragraph (f), except for periods not to exceed a total of 5 minutes during any 2 consecutive hours.
- (2) Flares shall be operated with a flame present at all times, as determined by the methods specified in paragraph (f).
- (3) An owner/operator has the choice of adhering to either the heat content specifications in paragraph (c)(3)(ii) of this section and the maximum tip velocity specifications in paragraph (c)(4) of this section, or adhering to the requirements in paragraph (c)(3)(i) of this section.
- (i) (A) Flares shall be used that have a diameter of 3 inches or greater, are nonassisted, have a hydrogen content of 8.0 percent (by volume), or greater, and are designed for and operated with an exit velocity less than 37.2 m/sec (122 ft/sec) and less than the velocity,  $V_{\max}$ , as determined by the following equation:
- $$V_{\max} = (X_{H_2} - K_1) * K_2$$
- Where:
- $V_{\max}$  = Maximum permitted velocity, m/sec.
- $K_1$  = Constant, 6.0 volume-percent hydrogen.
- $K_2$  = Constant, 3.9(m/sec)/volume-percent hydrogen.
- $X_{H_2}$  = The volume-percent of hydrogen, on a wet basis, as calculated by using the American Society for Testing and Materials (ASTM) Method D1946–77. (Incorporated by reference as specified in §60.17).

- (B) The actual exit velocity of a flare shall be determined by the method specified in paragraph (f)(4) of this section.
- (ii) Flares shall be used only with the net heating value of the gas being combusted being 11.2 MJ/scm (300 Btu/scf) or greater if the flare is steam-assisted or air-assisted; or with the net heating value of the gas being combusted being 7.45 MJ/scm (200 Btu/scf) or greater if the flare is nonassisted. The net heating value of the gas being combusted shall be determined by the methods specified in paragraph (f)(3) of this section.
- (4) (i) Steam-assisted and nonassisted flares shall be designed for and operated with an exit velocity, as determined by the methods specified in paragraph (f)(4) of this section, less than 18.3 m/sec (60 ft/sec), except as provided in paragraphs (c)(4) (ii) and (iii) of this section.
- (ii) Steam-assisted and nonassisted flares designed for and operated with an exit velocity, as determined by the methods specified in paragraph (f)(4), equal to or greater than 18.3 m/sec (60 ft/sec) but less than 122 m/sec (400 ft/sec) are allowed if the net heating value of the gas being combusted is greater than 37.3 MJ/scm (1,000 Btu/scf).
- (iii) Steam-assisted and nonassisted flares designed for and operated with an exit velocity, as determined by the methods specified in paragraph (f)(4), less than the velocity,  $V_{\max}$ , as determined by the method specified in paragraph (f)(5), and less than 122 m/sec (400 ft/sec) are allowed.
- (5) Air-assisted flares shall be designed and operated with an exit velocity less than the velocity,  $V_{\max}$ , as determined by the method specified in paragraph (f)(6).
- (6) Flares used to comply with this section shall be steam-assisted, air-assisted, or nonassisted.
- (d) Owners or operators of flares used to comply with the provisions of this subpart shall monitor these control devices to ensure that they are operated and maintained in conformance with their designs. Applicable subparts will provide provisions stating how owners or operators of flares shall monitor these control devices.
- (e) Flares used to comply with provisions of this subpart shall be operated at all times when emissions may be vented to them.
- (f) (1) Method 22 of appendix A to this part shall be used to determine the compliance of flares with the visible emission provisions of this subpart. The observation period is 2 hours and shall be used according to Method 22.
- (2) The presence of a flare pilot flame shall be monitored using a thermocouple or any other equivalent device to detect the presence of a flame.
- (3) The net heating value of the gas being combusted in a flare shall be calculated using the following equation:
- $$H_T = K \sum_{i=1}^n C_i H_i$$
- where:
- $H_T$ = Net heating value of the sample, MJ/scm; where the net enthalpy per mole of offgas is based on combustion at 25 °C and 760 mm Hg, but the standard temperature for determining the volume corresponding to one mole is 20 °C;
- $$K = \text{Constant}, \frac{1}{1.740 \times 10^{-7}} \left( \frac{1}{\text{ppm}} \right) \left( \frac{\text{g mole}}{\text{scm}} \right) \left( \frac{\text{MJ}}{\text{kcal}} \right)$$
- where the standard temperature for  $\left( \frac{\text{g mole}}{\text{scm}} \right)$  is 20°C;
- $C_i$ = Concentration of sample component i in ppm on a wet basis, as measured for organics by

Reference Method 18 and measured for hydrogen and carbon monoxide by ASTM D1946–77 or 90 (Reapproved 1994) (Incorporated by reference as specified in §60.17); and  
 $H_i$ = Net heat of combustion of sample component i, kcal/g mole at 25 °C and 760 mm Hg. The heats of combustion may be determined using ASTM D2382–76 or 88 or D4809–95 (incorporated by reference as specified in §60.17) if published values are not available or cannot be calculated.

- (4) The actual exit velocity of a flare shall be determined by dividing the volumetric flowrate (in units of standard temperature and pressure), as determined by Reference Methods 2, 2A, 2C, or 2D as appropriate; by the unobstructed (free) cross sectional area of the flare tip.
- (5) The maximum permitted velocity,  $V_{\max}$ , for flares complying with paragraph (c)(4)(iii) shall be determined by the following equation.  
 $\text{Log}_{10}(V_{\max}) = (H_T + 28.8) / 31.7$   
 $V_{\max}$  = Maximum permitted velocity, M/sec  
28.8 = Constant  
31.7 = Constant  
 $H_T$  = The net heating value as determined in paragraph (f)(3).
- (6) The maximum permitted velocity,  $V_{\max}$ , for air-assisted flares shall be determined by the following equation.  
 $V_{\max} = 8.706 + 0.7084 (H_T)$   
 $V_{\max}$  = Maximum permitted velocity, m/sec  
8.706 = Constant  
0.7084 = Constant  
 $H_T$  = The net heating value as determined in paragraph (f)(3).

**[45CSR13, R13-1801, A.4] [40 C.F.R § 60.18]**

- 5.1.11. The flare controlling the glycol dehydration still column shall be designed and operated in a manner that will ensure no visible emissions, as determined by Method 22 of Appendix A as stated in 40 C.F.R § 60.18(f), except for periods not to exceed a total of five (5) minutes during any two (2) consecutive hours. Records shall be maintained in accordance with Section 5.4.2 stating the date and time of each visible emission check and whether visible emissions were observed.

**[45CSR13, R13-1801, A.5]**

- 5.1.12. The flare control device, 1C, and pilot flame shall be operated at all times when emissions may be vented to it, as determined by methods specified in 40 C.F.R § 60.18(f). The presence of a flare pilot flame shall be monitored using a thermocouple or any other equivalent device to detect the presence of a flame.

**[45CSR13, R13-1801, A.6]**

- 5.1.13. The flare control device, 1C, shall be used only when the net heating value of the gas being combusted is 200 Btu/scf or greater. The net heating value of the gas being combusted shall be determined by the methods specified in 40 C.F.R § 60.18(f).

**[45CSR13, R13-1801, A.7]**

- 5.1.14. The flare control device, 1C, shall be designed for and operated with an exit velocity that satisfies the requirements of 40 C.F.R § 60.18(f).

**[45CSR13, R13-1801, A.8]**

- 5.1.15. The flare control device, 1C, shall only burn off-gases from the glycol dehydration still column and sufficient natural gas to meet the requirements of Section 5.1.11.  
**[45CSR13, R13-1801, A.9]**

## **5.2. Monitoring Requirements**

- 5.2.1. At a minimum of once per year, the permittee shall sample and analyze the inlet gas stream to the station utilizing gas chromatography for the presence of Sulfur. Proof of compliance with the 2000 ppm<sub>v</sub> limit will be considered demonstrated if the gas chromatography shows a total sulfur content of 2.8945 grains/100ft<sup>3</sup> or less. Records shall be maintained on site or at a reasonably available location for a period of no less than five (5) years stating the date and time of analysis and the sulfur content of the gas sampled.  
**[45CSR13, R13-1801, B.6] (DEHY, DEHY01)**
- 5.2.2. At a minimum of once per year, the permittee shall sample and analyze the inlet gas stream utilizing gas chromatography for the presence of H<sub>2</sub>S. Proof of compliance with the 50 grains/100ft<sup>3</sup> limit will be considered demonstrated if the gas chromatography shows a total H<sub>2</sub>S content of 0.7295 grains/100ft<sup>3</sup> or less. Records shall be maintained on site or at a reasonably available location stating the date of analysis and the hydrogen sulfide content of the gas sampled.  
**[45CSR13, R13-1801, B.7] (DEHY, DEHY01)**

## **5.3. Testing Requirements**

- 5.3.1. Reserved.

## **5.4. Recordkeeping Requirements**

- 5.4.1. Compliance with the limitations set forth in Section 5.1.10, 5.1.13 & 5.1.14 shall be determined by the following:
- (a) The permittee shall conduct visible emission checks and/or opacity monitoring for the DEHY flare (1C).

The visible emission checks shall determine the presence or absence of visible emissions. At a minimum, the observer must be trained and knowledgeable regarding the effects of background contrast, ambient lighting, observer position relative to lighting, wind, and the presence of uncombined water (condensing water vapor) on the visibility of emissions. This training may be obtained from written materials found in the References 1 and 2 from 40CFR Part 60, Appendix A, Method 22 or from the lecture portion of the 40CFR Part 60, Appendix A, Method 9 certification course.

Visible emission checks shall be conducted at least once per calendar month with a maximum of forty-five (45) days between consecutive readings. These checks shall be performed at flare (1C) emission point for a sufficient time interval, but no less than one (1) minute, to determine if any visible emissions are present. Visible emission checks shall be performed during periods of normal facility operation and appropriate weather conditions.

If visible emissions are present at the flare (1C) for three (3) consecutive monthly checks, the permittee shall conduct an opacity reading at that source(s) using the procedures and requirements of Method 9 as soon as practicable, but within seventy-two (72) hours of the final visual emission check. A Method 9 observation at a source(s) restarts the count of the number of consecutive readings with the presence of visible emissions.

Records shall be maintained on site stating the date and time of each visual emission check and whether visible emissions were observed. Visible emission checks shall not be required during start-ups, shut-downs and malfunctions. This will also show compliance with Section 5.1.2.

**[45CSR§30-5.1.c.] [DEHY, Flare 1C]**

- (b) Maintaining monthly design records/calculations indicating the gas flare flow rate and the maximum allowable flare exit gas velocity.

**[45CSR13, R13-1801, B.3] (DEHY)**

- (c) The permittee shall record the date, time and duration of any occurrence of pilot flame absence for the flare control device, DEHY, each month during glycol dehydration still column operation. If the pilot flame was operational for the entire month, the permittee shall note in the records that the pilot flame was operational the entire month.

**[45CSR13, R13-1801, B.2] (DEHY)**

- 5.4.2. All required records set forth in Sections 5.1.8, 5.1.11, 5.4.1.(b), 5.4.1.(c), 5.2.1., and 5.2.2. shall be maintained on site for a period of five (5) years, shall be certified by a responsible official, and shall be made available to the Director or his/her duly authorized representative upon request.

**[45CSR13, R13-1801, B.9]**

## **5.5. Reporting Requirements**

- 5.5.1. Any violation(s) of the allowable visible emission requirement for any emission source discovered during observations using 40CFR Part 60, Appendix A, Method 9 must be reported in writing to the Director of the Division of Air Quality as soon as practicable, but within ten (10) calendar days, of the occurrence and shall include, at a minimum, the following information: the results of the visible determination of opacity of emissions, the cause or suspected cause of the violation(s), and any corrective measures taken or planned.

**[45CSR§30-5.1.c]**

## **5.6. Compliance Plan**

- 5.6.1. Reserved.

## **6.0 Compressor Engines [emission point ID(s): EN01, EN02]**

### **6.1. Limitations and Standards**

6.1.1. **40 C.F.R. 63 Subpart ZZZZ Compliance Date.** If you have an existing stationary SI RICE located at an area source of HAP emissions, you must comply with the applicable emission limitations and operating limitations no later than October 19, 2013.  
**[40 C.F.R. §63.6595(a)(1)]**

6.1.2. For each non-emergency, non-black start 2SLB stationary RICE, you must meet the following requirements, except during periods of startup:

- a. Change oil and filter every 4,320 hours of operation or annually, whichever comes first;<sup>1</sup>
- b. Inspect spark plugs every 4,320 hours of operation or annually, whichever comes first;
- c. Inspect all hoses and belts every 4,320 hours of operation or annually, whichever comes first, and replace as necessary.

During periods of startup you must minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes.

<sup>1</sup> Sources have the option to utilize an oil analysis program as described in 40 C.F.R. §63.6625(j) (condition 6.3.1.) in order to extend the specified oil change requirement in permit condition 6.1.2.a.

**[40 C.F.R. §§ 63.6603(a) (Table 2d, Item 6), 63.6625(h)]** *This requirement is subject to the compliance date in permit condition 6.1.1.*

6.1.3. If you own or operate an existing non-emergency, non-black start 2SLB stationary RICE located at an area source of HAP emissions, you must operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.  
**[40 C.F.R. §63.6625(e) and (e)(5)]** *This requirement is subject to the compliance date in permit condition 6.1.1.*

6.1.4. For each existing, non-emergency 2SLB stationary RICE located at an area source of HAP, complying with the requirement for work or management practices, you must demonstrate continuous compliance by (i) operating and maintaining the stationary RICE according to the manufacturer's emission-related operation and maintenance instructions; or (ii) develop and follow your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.  
**[40 C.F.R. §63.6655(d) (Table 6, Item 9)]** *This requirement is subject to the compliance date in permit condition 6.1.1.*

### **6.2. Monitoring Requirements**

6.2.1. Reserved.

### 6.3. Testing Requirements

- 6.3.1. If you own or operate a stationary SI engine that is subject to the management practices in item 6 of Table 2d to 40 C.F.R. 63 Subpart ZZZZ (permit condition 6.1.2.), you have the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Table 2d to 40 C.F.R. 63 Subpart ZZZZ. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2d to 40 C.F.R. 63 Subpart ZZZZ (permit condition 6.1.2.). The analysis program must at a minimum analyze the following three parameters: Total Acid Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Acid Number increases by more than 3.0 milligrams of potassium hydroxide (KOH) per gram from Total Acid Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine (condition 6.1.3.).  
[40 C.F.R. §63.6625(j)] *This requirement is subject to the compliance date in permit condition 6.1.1.*

### 6.4. Recordkeeping Requirements

- 6.4.1. You must keep records of the maintenance conducted on the stationary RICE in order to demonstrate that you operated and maintained the stationary RICE and after-treatment control device (if any) according to your own maintenance plan if you own or operate an existing stationary RICE located at an area source of HAP emissions subject to management practices as shown in Table 2d (condition 6.1.2.) to 40 C.F.R. 63 Subpart ZZZZ.

[40 C.F.R. §63.6655(e) and (e)(3)] *This requirement is subject to the compliance date in permit condition 6.1.1.*

#### 6.4.2. Records for 40 C.F.R. 63 Subpart ZZZZ.

- (a) Your records must be in a form suitable and readily available for expeditious review according to 40 C.F.R. §63.10(b)(1).
- (b) As specified in 40 C.F.R. §63.10(b)(1), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.
- (c) You must keep each record readily accessible in hard copy or electronic form for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 C.F.R. §63.10(b)(1).

[40 C.F.R. §§ 63.6660(a), (b), and (c)] *This requirement is subject to the compliance date in permit condition 6.1.1.*

## **6.5. Reporting Requirements**

- 6.5.1. The permittee must report all deviations as defined in 40 C.F.R. 63 Subpart ZZZZ in the semiannual monitoring report required by permit condition 3.5.6.

**[40 C.F.R. §63.6650(f)]** *This requirement is subject to the compliance date in permit condition 6.1.1.*

## **6.6. Compliance Plan**

- 6.6.1. Reserved.